

REMARKS/ARGUMENTS

Reconsideration of this patent application is respectfully requested in view of the foregoing amendments, and the following remarks. Claims 1-2 are in the application. Claim 1 had been amended and claim 2 has been cancelled.

Claims 1-2 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Evans*, U.S. Patent No. 6,003,479, in view of *Sougawa*, U.S. Patent No. 4,969,433, *Howes*, U.S. Patent No. 5,056,681, and *Clary*, U.S. Patent No. 3,430,969. Essentially, the Examiner's position was that *Evans* discloses the piston recited in the claims, except the piston and ring element being formed of aluminum and being forged and cast (as taught by *Sougawa*), the screw connection being sealed by means of a weld seam (as taught by *Howes*), and having a ring insert consisting of Ni resist (as taught by *Clary*).

This rejection is respectfully traversed and reconsideration is expressly requested.

Claim 1 has been amended to include the feature that the ring insert consists of austenitic cast iron. This feature was claimed in claim 2 as Ni Resist, which is a trademarked name for

austenitic cast iron. Claim 2 has now been canceled. Claim 1 has also been amended to recite that the ring insert is cast in to the ring element. Support for this amendment can be found in the specification on pages 3 and 4 of the specification.

As set forth in amended claim 1, the present invention provides a piston having a basic body whose one face forms a piston head, pin bosses with pin bores disposed on the underside of the basic body, and skirt elements that connect the pin bosses with one another. The present invention also provides a ring element disposed in the radially outer edge region of the piston head, which forms a ring shaped cooling channel with the basic body, and which is connected with the basic body by way of a screw connection.

The present invention also provides for employing welding as a means of sealing the threaded connection. The Examiner asserts that this would have been obvious to one of ordinary skill over *Evans* in view of *Howe*. *Howe* relates to containers used in promotional advertising to award prizes wherein the containers are screwed shut and bonded to prevent the fluids from leaking. One skilled in the art would not look to *Howe* when confronted with the problem of sealing the cooling channel of a piston for an internal combustion engine to prevent hot combustion gases

which are under pressure from penetrating into the cooling channel.

The Examiner requires three references to reconstruct the structure of the invention. However, in the present invention, the ring element is produced in the casting method, and a ring insert is also cast in at the same time. None of the references cited by the Examiner teach this feature. This feature is advantageous because it is now possible to equip a forged piston with a ring insert in a much simpler and cost effective manner than *Clary* proposes. Furthermore, it is impossible to implement a circumferential, ring-shaped cooling channel when forging in the ring insert, by way of which channel the ring insert can be cooled, as it is possible in the present invention, using the ring element.

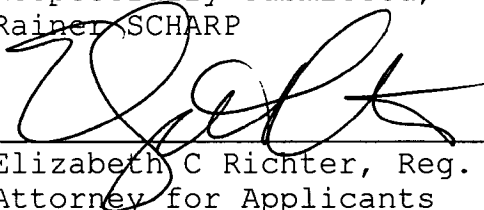
Thus, it is respectfully submitted that *Evans* in view of *Sougawa*, *Howes*, and *Clary* can not render obvious Applicants' piston in that *Howes* is unrelated to the problems addressed by the present invention, and *Clary* does not teach the features in the present invention. Accordingly, it is respectfully submitted that claim 1 is patentable over the cited references.

Claims 1-2 were also rejected on the ground of non-statutory obviousness type double patenting as being unpatentable over

claims 1-3 of U.S. Patent No. 6,938,537 in view of Sougawa, U.S. Patent No. 4,969,433, Howes, U.S. Patent No. 5,056,681, and Clary, U.S. Patent No. 3,430,969. In response, Applicants are submitting herewith a Terminal Disclaimer, thereby overcoming the double-patenting rejection.

In view of the foregoing, it is respectfully requested that the claims be allowed and this case be passed to issue.

Respectfully submitted,
Rainer SCHARP



COLLARD & ROE, P.C.
1077 Northern Boulevard
Roslyn, New York 11576
(516) 365-9802
ECR:cmm

Elizabeth C Richter, Reg. No. 35,103
Attorney for Applicants

Enclosures: Terminal Disclaimer
Check in the amount of \$130.00

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 26, 2007.


Amy Klein